GROSSE ILE MUNICIPAL AIRPORT, HANGAR NO. 1
Meridian and Groh Roads Intersection
Detroit vicinity
Wayne County
Michigan

HAER NO. MI-93-A

#### PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD
National Park Service
Northeast Region
Philadelphia Support Office
U.S. Custom House
200 Chestnut Street
Philadelphia, P.A. 19106

# HAER MICH 82-DETRO.Y,

#### HISTORIC AMERICAN ENGINEERING RECORD

#### GROSSE ILE MUNICIPAL AIRPORT, HANGAR NO. 1

HAER No. MI-93-A

Location:

Meridian and Groh Roads Intersection

Detroit vicinity

Wayne County, Michigan

UTM: 17.321110.4663590

Quad: Rockwood, Michigan 1:24,000

Date of Construction:

Hangar No. 1

1942

Engineer/Architect:

U.S. Navy

Present Owner:

Township of Grosse Ile Wayne County, Michigan

Present Use:

Hangar No. 1 - Airplane Storage and Offices

Significance:

Hangar No. 1 is part of the Grosse Ile Municipal Airport. Hangar No. 1 was part of the Grosse Ile Naval Air Station which assumed a significant role during the Country's military preparation for WWII, serving as a training facility for both

U.S. and British Airmen.

Project Information:

An evaluation of the S.E. Tower at Hangar No. 2 advised removal of the structure. To mitigate the adverse effect, the State Historic Preservation Office stipulated documentation and replication of design elements on the S.E. Tower and Hangar No. 1. This documentation was undertaken to fulfill the stipulation.

CHARLES E. RAINES COMPANY

Township Engineers 17700 Fort Street

Riverview, Michigan 48192

## GROSSE ILE MUNICIPAL AIRPORT, HANGAR NO. 1 HAER NO. MI-93-A (Page 2)

In 1922 Carl B. Fritsche, Detroit aviation enthusiast and business promoter, teamed up with Ralph Upson, a record setting balloonist and designer, and with support of leaders of the automotive industry, organized the Aircraft Development Corporation, a division of the Detroit Aircraft Corporation. They were interested in building the world's first all-metal dirigible. Fritsche started a pioneer air club called "Les Voyagers," and his search for a headquarters for the club led him to Grosse Ile where he purchased the Olds mansion on Elba Island, renaming it "Chateau Voyageur."

(Lansing automobile magnate Ransom E. Olds had purchased a large tract of land at the southern end of Grosse Ile in the early 1900s, including Elba Island and all land West to Frenchman's Creek, South of Groh Road. He built a magnificent compound on Elba Island including a magnificent summer home for his family. Olds' purchase encompassed portions of the Louis Groh farm, the island's largest farm. Olds continued to farm, growing wheat and corn and raising Aberdeen Angus cattle, on land which later comprised the Naval Air Station landing field).

During 1925 in the Detroit area, a Naval Reserve lieutenant, Robert Bridges, formed a unit of four Navy men who shared an interest in aviation. They practiced drills and instruction periods of theory of flight and operations, meeting at the Detroit Naval Armory. Flight operations at that time were based at the Army Air Base in Mt. Clemens. The commanding officer of the armory, Lt. Commander Richard Thornton Brodhead, Jr., had been given the task of reorganizing the Naval Reserves in the Detroit district. (The Brodhead Naval Armory later replaced the Detroit Naval Armory.) Brodhead convinced the City of Detroit to provide a grant of land in Memorial Park with access to the Detroit River. The City also funded construction of a metal hangar, which was dubbed the "tin hangar", just big enough for two seaplanes. The group grew in size and the men soon began flights to Selfridge from the shore across from Belle Isle, much to the consternation of Detroit citizens. In 1926, the Navy officially designated the Detroit unit as a torpedo squadron and assigned Lt. Charles D. Williams, Jr. as commanding officer.

In 1926 Congress appropriated \$300,000 for construction of the world's first all-metal airship and the Navy assigned the contract to the Aircraft Development Corporation in August. The Company purchased the Olds farm property and built an enormous hangar in which to build the metal aircraft. They cleared trees, and designated a 3,000 foot diameter circle North of the hangar as a landing field.

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The following year, realizing that the citizen complaints about taking off and landing at the Detroit River site could not be ignored, Lt. Com. Brodhead and Lt. Williams investigated other locations. They were attracted to Grosse Ile in part due to the operations of the Aircraft Development Corporation, and probably in part because Brodhead was a descendant of William Macomb, one of two brothers who settled Grosse Ile. The two men convinced the State of Michigan to lease a narrow five acre finger of land from the Aircraft Development Corporation, land which was mostly a submerged cattail marsh, extending southeast of the ADC hangar to a quiet bay known as Olds Harbor (now called Gibraltar Bay). Negotiations between the State and the Navy Department assigned the property to the Naval Reserve Aviation Unit. Brodhead also secured a legislative appropriation of \$100,000 to construct a seaplane base, and Williams was placed in charge of the project. They dredged and filled in this peninsula site and built hangars, living quarters, mess hall, repair shops, and other buildings on the piles they drove into the fill. 1927 marks the birth of Naval aviation on Grosse Ile.

In 1928 Wayne County paved a 20 foot concrete roadway in a circle around the landing field and connected the road's northern end with Meridian Road at Groh Road. Work on the seaplane base was finished. The old tin hangar in Detroit was disassembled, loaded on a barge, and brought down to the base and located at the intersection of Meridian Circle Road and Quarry Road, a short east-west road leading to the old quarry which the reservists used as a swimming hole.

Also in 1928 a group of young Detroit businessmen formed Wings, Inc. to sell and service aircraft and provide flight instructions. The group included Harry Graham, president; Stanley Knauss (previously a partner with Eddie Stinson, founder of Stinson Aircraft Corporation, in a Detroit based air taxi operation), vice-president; and a Marine reserve aviator, C. V. Burnett (who went on to a notable aviation career in the Detroit area), secretary-treasurer. Wings arranged to lease property from the Aircraft Development Corporation at the Grosse Ile Airport. They constructed a combination landplane hangar and administration building of buff colored brick and steel. West of Meridian Road at the edge of the concrete circle around the landing field. The Wings venture was short-lived and the group sold the hangar and business to Curtiss-Wright Aeronautical Corporation in December. They retained Burnett as general manager. Curtiss-Wright expanded the facilities by building a two story read brick barracks and accompanying multi-unit garage to serve as a residence for their personnel with extra rooms for transients.

By July of 1929 the seaplane was ready for operations and Lt. Williams was appointed to command the new base (Williams, who was the son of the Bishop of the Episcopal Diocese of Michigan, retired from the Navy a Rear Admiral.) The Grosse IIe U.S. Naval Reserve Aviation Base was dedicated on September 7, 1929. This was the second such base to be located inland off the seaboard, the first being Pensacola.

## GROSSE ILE MUNICIPAL AIRPORT, HANGAR NO. 1 HAER NO. MI-93-A (Page 4)

During October of 1929 flush runway lights, which turned on automatically by weather-vane control to outline the runway most directly into the wind, were installed. It was the first installation of its kind in the country. The ZMC-2, the world's first metal-clad airship, was completed in August and delivered to the Navy at Lakehurst, New Jersey, in September. (A second airship was never built as the Great Depression intervened. The dirigible operation closed down in 1931. The hangar was finally dismantled in 1960 and moved to Trenton, Michigan, where it formed a central portion of a bowling alley.)

In 1932 Curtiss-Wright was hit by recession and activity was closing down. Lt. Williams and Com. Brodhead realized that real estate operators were contemplating the property owned by Curtiss-Wright and that immediate action was necessary. No federal funds were available and the State Legislature was not in session, so Brodhead obtained temporary funds from a fellow officer, Lt. Com. Roy May, to pay back taxes on the property and to lease it in the name of the State. The State of Michigan subsequently purchased this property for the Navy. The State now owned property on the Upper and Lower seaplane base with the landing field in between. By later 1932, however, the Aircraft Development Corporation was also in severe financial difficulty. This led to a court order and subsequently, the State leased the company's entire holdings, including the landing field and balloon hangar, for one dollar and other considerations to the federal government, for the Naval Reserve Aviation Base. This included the airfield and existing buildings. There were no runways, but the circular cement country road around the field was occasionally used to taxi aircraft down to the seaplane base from the hangar. This placed about 375 acres under the Navy's control.

The country's financial woes struck the Navy, and reservists' pay and flying time were cut substantially in 1933. Officers were quartered in the red-brick Curtiss-Wright barracks which also served as a mess hall. Aircraft were stored in the old Curtiss-Wright hangar where all operations were centered. Enlisted men were quartered in the frame buildings at the original seaplane base. Also located in that area were a three-bay boathouse and concrete dock facilities. The Navy owned a crash boat for rescue work on the Detroit River and a smaller airboat for use when waterways were frozen. (All facilities are gone today. All that remains is the concrete landing pad.)

During 1934 and 1935 the State made some improvements to the base, adding garages, warm-up aprons, and a large white wooden barracks for Navy enlisted men. (This structure was located to the West of the red-brick building built by Curtiss-Wright. The building later served as living quarters for the WAVES stationed at the base, and then as headquarters for the Marine Air Reserves. The building burned down in 1987, a result of arson.)

## GROSSE ILE MUNICIPAL AIRPORT, HANGAR NO. 1 HAER NO. MI-93-A (Page 5)

When WWII began in 1939 only 344 Naval aviators were available in the nation's entire Naval Air Reserve. By the end of 1940, Grosse Ile had been training only 23 aviators a month. By January of 1941, mobilization requirements called for almost three thousand in the first three months alone. Emergency action was needed. Wheels were set in motion for the Navy to buy the property on which the base was located. The Curtiss-Wright barracks were expanded. Work started on a new hangar and other facilities.

On August 28, 1941 the first 100 British youths arrived for flight training on Grosse Ile. Over 1,800 cadets for the British Navy Air Force and Fleet Air Arm received primary flight training on Grosse Ile. They were sent to Pensacola or Lambert Field, St. Louis, for intermediate training. (British cadets who died during training were buried at Oakwood Cemetery, Flat Rock, Michigan).

By 1942 the base almost overflowed its bounds. The Navy expanded from 375 acres to 604 when additional acreage North of Groh Road was acquired. A 5\$ million dollar construction project was underway. A large round pad of concrete was laid on the original landing field to serve as a landing mat for primary trainers. Three 150' wide concrete runways were laid in a triangular pattern around the circular landing pad. Two were almost 5,000 feet long and they were connected at the northern ends by a slightly shorter runway. High intensity runway lights were installed. A TACAN approach system for instrument approaches was in operation as well as a Ground Controlled Approach Unit mounted on a 360 degree turntable. The old Tin Hangar was moved to its present location. On December 9, 1942, the official designation of the base was changed to U.S. Naval Air Station, Grosse Ile.

The Olds Mansion on Elba Island was converted into a USO building to provide entertainment for the men and women, who arrived the next year. (It is today privately owned and divided into rental apartments.) By the end of 1942, there were more than 2,000 Americans plus the expanding R.A.F. contingent. The base also supported sixteen auxiliary fields on the farmlands southwest of the island. By the end of October, 1942, Grosse Ile was leading all Naval Reserve bases in turning out primary students for the United Nations. (Flight training was in four stages: pre-flight, primary, intermediate, and advanced.)

The initial surge of expansion was in 1942, though construction continued periodically into 1945. On land South of Groh Road the Navy built a second large hangar with a flight tower, and an indoor drill hall with a high arched roof, a supply building, a metal shop, and a building housing a carpenter shop, hydraulics shop, machine shop, and paint spray area. A garage for Navy vehicles was built and later expanded to serve as a fire station. Alongside a 200,000 gallon water tank (now gone), a water pump house was built. Two electric substations were put up. East of the drill hall, the Navy put up a sign shop and storage building and a paint storage building.

## GROSSE ILE MUNICIPAL AIRPORT, HANGAR NO. 1 HAER NO. MI-93-A (Page 6)

On land North of Groh Road, an assortment of wood frame buildings went up. There were living quarters for the rapidly expanding force, a large recreation building, an olympic-sized swimming pool, a brig, classrooms, the captain's quarters, a medical dispensary, etc. They built a transportation garage and parachute loft, a Link Trainer building, a mess hall, a cook's house, and bulk and commissary store. (During the years after the base closed, many buildings were torn down. The captain's quarters structure was burned in 1976 as a training exercise for the Downriver Mutual Aid Fire Department Task Force. The swimming pool disintegrated from lack of attention. The property today serves as a commercial-business Air-Park for Grosse Ile. Just four of the Navy buildings remain, and one of those was partially rebuilt after a fire.)

In 1943 the first WAVE contingent arrived. Two subdivisions were developed on Grosse Ile to meet demands for wartime housing. Many islanders and mainland people rented rooms to the Navy people. In January the base opened a small commissary store.

In early spring of 1945, (President) George Bush was stationed at Grosse Ile Naval Air Station. He and his new bride, Barbara, lived in Trenton. Their landlady lives there today. He later was stationed in Maine and Virginia, and he was at Oceana Navel Air Station, Virginia Beach, in August, 1945, when the war ended. When World War II ended, all activities on Grosse Ile were reduced sharply. The last of the British Cadets were transferred to St. Louis.

July 1, 1946 marked the official nationwide launching of a new Naval Air Reserve Program headquartered at Glenview Naval Air Station near Chicago. Grosse Ile became part of the Naval Air Reserve Training Command and the "Weekend Warriors" were bom. Ten Navel Air Reserve squadrons and one Marine Air Reserve squadron drilled one weekend a month. The base included a complement of Continuous Active Duty personnel. A Marine Air Reserve detachment was activated in April.

During August of 1949 all land on which the Grosse Ile Naval Air Station rested, became Navy property when Michigan Governor Kim Sigler and an Act of the Legislature, turned over the deed to the last 15.1 acres which previously had been leased from the State by Captain W.D. Anderson, skipper of the base.

During the Korean War, one Navy and two Marine Grosse Ile NAS squadrons were recalled to active duty. In 1951 and 1952 the first and only jet fighters were used (McDonnell FH-1 Phantoms). A plan to expand the runways was abandoned on objection of the Grosse Ile Township Board.

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In 1955 the Army installed a Nike-Ajax guided missile base North of Groh Road between Meridian and East River with the underground missile chambers located South of Quarry Lake and North of the original seaplane base. Nike-Ajax was a surface to air anti-aircraft rocket armed with high explosives. (This base was declared obsolete and closed in 1962.) Helicopters were added in the late 1950s.

During 1961 a Navy Air Anti-Submarine Squadron was recalled during the Berlin Crises. They returned after a year of duty. Many other reservists attached to Grosse Ile were recalled at that time. They were released to inactive duty in 1962.

The Navy constructed a water tower and pump house. On September 3, 1962, a spectacular air show was staged on the 35th birthday of Naval aviation on Grosse Ile. Nearly 2,000 Naval and Marine Air Reservists were attached to the base at that time. The physical plant was valued at almost \$11 Million, and with land and equipment aboard the station, the plant account was over \$14 Million.

In 1967 word was received that the Defense Department planned to close the Grosse Ile Naval Air Station in September. At that time, about 550 active duty Navy men, and 1,600 Navy and Marine, Michigan and Ohio reservists, were attached to Grosse Ile.

The base closed in September of 1969 as one of many military installations considered obsolete or excessive throughout the country. The Grosse Ile personnel were transferred to Selfridge Air Force Base at Mt. Clemens, which was designated as Naval Air Facility, Detroit, with reservists from Michigan, Ohio, Indiana, Pennsylvania, and New York.

On December 14, 1970 a quit claim was acquired by the Township of Grosse Ile in which the United States government turned over buildings and most of the 604 acres of the Naval Air Station to the Township to operate as a Municipal Airport and accompanying industrial park. This property is now known as the Grosse Ile Municipal Airport (about 440 acres) and Air-Park (about 120 acres). It is a Class B general aviation airport at present, accommodating about 100 planes. There are 65 T-hangars for private aircraft. The airport and air-park are self-supporting. Property retained by the federal government includes 40.5 acres at the southeastern corner, covering Quarry Lake, the old Nike-Ajax site, and the old seaplane base property, and about 3 acres of property occupied by the Environmental Protection Agency's Large Lakes Research Station including two Navy buildings and the old Tin Hangar.

#### GROSSE ILE MUNICIPAL AIRPORT, HANGAR NO. 1 HAER NO. MI-93-A (Page 8)

#### **BIBLIOGRAPHY**

#### Resources Used:

1944 blueprint of the Naval Air Station, Grosse Ile Museum, Grosse Ile, MI.

1934 drawings, Naval Reserve Aviation Base, Grosse Ile Museum, Grosse Ile, MI.

The Forty Year Hitch, Lt. Commander Dick Melton, USNR, Published 1970, Publishers Consulting Service, Inc.; Cavalier Printery, Wyandotte, Michigan

Photographs and archives at the Grosse Ile Museum, Grosse Ile, MI.

Conversations with persons who served at the Grosse Ile Base

Conversations with Grosse Ile Airport personnel

#### This history has been read and approved by:

Captain Gilbert J. Roth USNR (Ret)

Chief Oscar Phillips, USN (Ret)

Chief Lyle Eastom, USNR-TAR (Ret), Airport Maintenance Manager

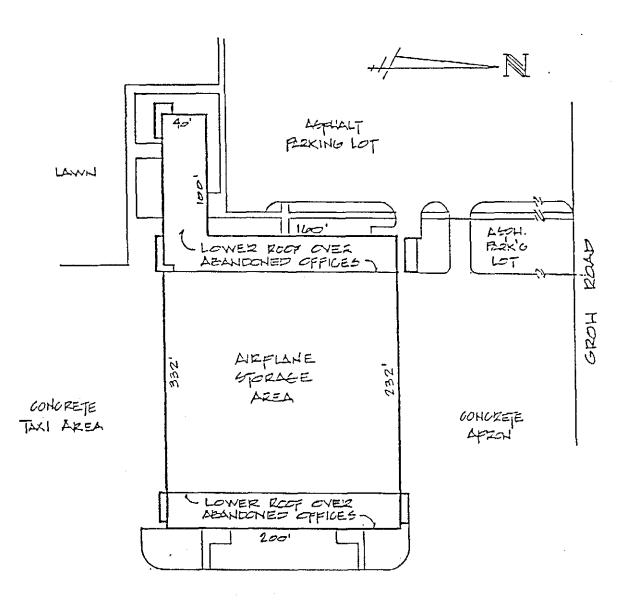
Margaret Bailey, Grosse Ile Airport Secretary

William Foley, Grosse Ile Airport Commissioner

Robert Kopke, Grosse Ile Historical Society

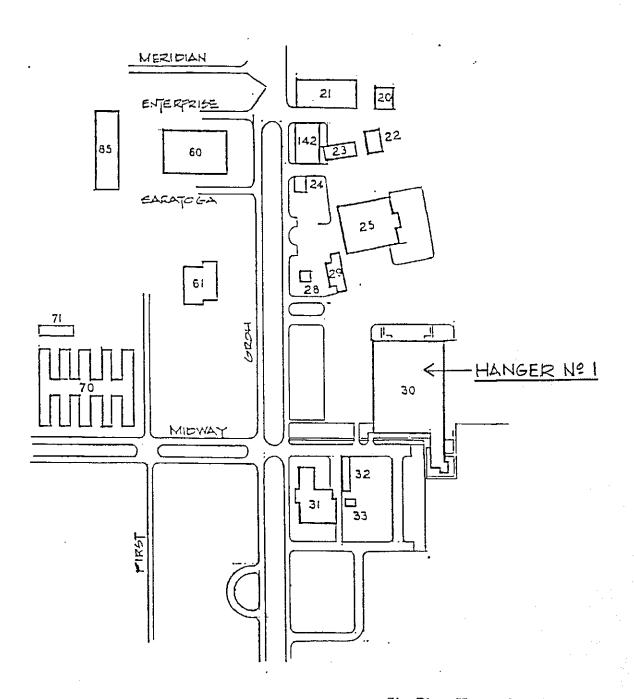
#### **Interviews**

- Mr. Jon Stout, August/September, 1995, Grosse Ile, Michigan Grosse Ile Municipal Airport Manager
- Mr. Lyle Eastom, August/September, 1995, Grosse Ile, Michigan Grosse Ile Municipal Airport Maintenance Manager USNR-TAR (Retired); Served at Grosse Ile Naval Air Station
- Ms. Margaret Bailey, August/September, 1995, Grosse IIe, Michigan Grosse IIe Municipal Airport Secretary



Hangar No. 1, Layout Plan





Site Plan, Hangar No. 1

## GROSSE ILE MUNICIPAL AIRPORT, HANGAR NO. 1 HAER NO. MI-93-A (Page 11)

## **BUILDING LISTING**

Location	
No.	Building
20.	Tin Hangar (line crew)
21.	Supply Building
22.	Paint and Dope Spray
23.	Paint Storage
24.	Electric Sub Station (East)
25.	Landplane Hanger No. 2
28.	Water Pump House
29.	Fire Station
30.	Landplane Hanger No. 1
	(Administration Office)
31.	Bachelor Officers' Quarters No. 1
	Comm. Officers' Mess
32.	Officers' Garage
33.	Electric Sub-Station (West)
60.	Transportation Garage & Parachute Loft
61.	Link Trainer Building
70. <sup>*</sup>	Mess Hall (S-3)
71.	Cook's Quarters (S-3 revised)
85.	Bulk and Commissary Stores
142.	Water Tower & Pump House (1962)
	<del>-</del>